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**BOEING**

1962 Annual Report



*The Boeing Company is composed of an administrative headquarters organization and five operating divisions. Headquarters, the Aero-Space Division and the Industrial Products Division are located in Seattle, Washington. The Transport Division is in Renton, Washington, 12 miles from Seattle. Activities of the Military Aircraft Systems Division are carried on in both Wichita, Kansas, and Seattle. The Vertol Division is in Morton, near Philadelphia, Pennsylvania.*

*The Company also has two wholly owned subsidiaries—Boeing of Canada, Limited, located in Arnprior, Ontario and Boeing International Corporation, with principal offices in Seattle.*

### **The Faces of Research**

*"Let no improvement pass us by . . ."*

*W. E. Boeing*



## BOEING 1962 ANNUAL REPORT

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Annual meeting of Boeing stockholders will be held at the offices of the Company, Seattle, Washington, on May 7, 1963. Formal notice of the meeting, proxy statement and form of proxy will be sent to stockholders about April 1.

## HIGHLIGHTS

	1962	1961
Sales . . . . .	\$1,768,535,000	\$1,800,910,000
Net earnings . . . . .	27,154,000	35,661,000
Dividends paid . . . . .	15,976,000	13,549,000
Net earnings per share . . . . .	\$ 3.40	\$ 4.47
Dividends paid per share . . . . .	2.00	1.70
Per cent net earnings to sales . . . . .	1.54%	1.98%
Shares outstanding at year end . . . . .	7,992,376	7,982,430
Book value per share . . . . .	\$ 33.89	\$ 32.49
Total salaries and wages paid . . . . .	\$ 768,374,000	\$ 628,713,000
Average number of employees . . . . .	104,100	88,200
Additions to property, plant, and equipment . . . . .	\$ 50,143,000	\$ 26,770,000
Depreciation and amortization of property, plant, and equipment . . . . .	21,049,000	20,636,000

## Review of the Year

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### To the Stockholders:

Sales increases under Minuteman, KC-135 and C-135 programs, and first sales under the Saturn booster contract, served to maintain the Company's over-all 1962 sales at a level close to that of 1961, despite phaseout of deliveries of B-52s and Bomarc missiles. Net earnings and earnings per share for 1962 are down from 1961 as explained in more detail in the financial section.

In the complex field of intercontinental ballistic missiles, the Company delivered the first two flights of Minuteman missiles, operationally ready, to the Strategic Air Command precisely on a schedule established more than two years earlier.

At the government-owned Michoud facility near New Orleans and at the Marshall Space Flight Center in Huntsville, Alabama, more than 2,600 Boeing employees were at work by year end in the development and manufacture of the S-1C first stage booster for the advanced Saturn V space launch vehicle.

The first of the new Model 727 three-engine jet transports rolled from final assembly in November. This short-to-medium-range airliner had been ordered by seven major airlines, for a total of 131, by the time the new plane first flew in February of 1963. Orders also continue to be received for other Boeing jet airliners.

In 1962, KC-135 military jet tankers and C-135 troop and logistic jet cargo transports were delivered in quantity to the United States Air Force. Despite phasing out of B-52 jet bomber production during the year, modification work continued on these aircraft.

Two advanced helicopter models moved into production during the year, the Marine's "Sea Knight" and the Army's "Chinook", and first models were accepted by the services.

In all plants of the Company, strong research, development and manufacturing efforts continued in support of present programs and future product lines. At facilities in Seattle, a continuing effort went forward on the space glider (Dyna-Soar) program. During the year the vehicle was officially designated "X-20".

Following a number of extensions in the TFX competition, the Department of Defense made the award to a competitor. Loss of this inter-service supersonic fighter order was a keen disappointment.

Substantial increases to Company-owned facilities were made during the year, through construction of new buildings and through purchase of a government-owned facility.

Extended negotiations for new three-year labor contracts were held in the second half of 1962 and continued into 1963. On January 25, the government enjoined the two major unions involved from striking, under provisions of the Taft-Hartley Act, for a period of 80 days. If negotiations do not result in a settlement after 60 days, the Act provides that the Company's last offer must be submitted to a secret vote of all employees in the bargaining unit. Various aspects of the Company's right to manage the business, to evaluate the performance of its employees and of the union shop issue are the principal points of contention.

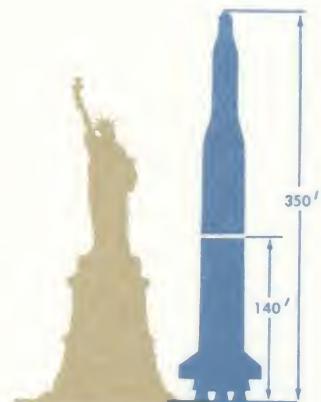
## Missiles and Space

Missile and space-oriented activities have become a substantial portion of the Company's business as governmental effort increases in these fields. Three major Company projects are in development and production stages, and a fourth—the Bomarc pilotless interceptor missile program on which production has been substantially completed—is on a maintenance and operational support basis. The last four Bomarc missile bases were delivered from two to eight weeks ahead of contract schedule.

The on-schedule delivery of the first two operational flights of Minuteman intercontinental ballistic missiles to the Strategic Air Command was recognized by Air Force personnel as an outstanding achievement. A flight consists of ten missiles, each in its concrete underground silo, each ready for almost instant firing in response to electronic command from the launch control centers. Basic plans called for 800 Minuteman missiles, and 150 more have been added in the Fiscal Year 1964 budget request.

The magnitude of the Minuteman effort is evident in its geographical distribution alone. As weapon system integrator, Boeing has responsibility for assembly, test, launch control and ground support systems. Many components are manufactured in Seattle. Assembly of the missiles is carried out in the Company-operated Air Force Plant 77 in Ogden, Utah, and on-site installation of launch control and ground support equipment is being made in five states. Test firing programs have been carried out at Cape Canaveral, Florida and Vandenberg Air Force Base, California. At Vandenberg, the Company provides training for Air Force instructors, and assists the Strategic Air Command in the initial test launchings of the silo-housed missiles.

The Boeing effort is well under way in connection with development and production of the first stage for the advanced Saturn V space launch booster. The Company's participation in the NASA program is in engineering, designing, developing, fabricating and assembling and testing of the vehicle, designated the S-1C. The manufacture is being accomplished by Boeing at the government-owned Michoud, Louisiana, facility. Coordination of engineering efforts with the National Aeronautics and Space Administration is carried out at Huntsville, Alabama, where the NASA Marshall Space Flight Center is located.



To lift entire Saturn V space launch vehicle, Boeing first stage, 140 feet tall and 33 feet in diameter, will supply 7½ million pounds of thrust

The S-1C is the largest booster being developed in the United States. It is designed to develop seven and one-half million pounds of thrust and is to be used to provide the initial lift for the advanced Saturn V Apollo moon-landing mission. Present contract arrangements call for construction and test of 10 flight and one ground test vehicles. These first stage units will stand taller than the base of the Statue of Liberty, and their diameter will equal the width of the average home.

Throughout the year, development continued on the X-20 (Dyna-Soar) manned space glider, being built under contract with the United States Air Force. A significant Air Force decision eliminated sub-orbital flights from the test phase of the experimental vehicle. Assignment of the more powerful Titan III booster to the program made this step possible.

Detailed laboratory studies of man's adaptability to space have been made by Company medical and scientific researchers. In specially designed equipment, the reactions of pilots to heat, noise, isolation, vibration and simulated extremes of altitude have been measured.

During 1962, Boeing first measured man's ability to do productive work in an apparatus which simulated a weightless state. Working with results from this and other environmental studies, and in consultation with the Air Force Astronauts who will fly the X-20, Boeing scientists and engineers have developed the cockpit arrangements and controls of the space glider. Its potential contribution to the future exploration of space is especially significant since it will provide data concerning hypersonic flight both within and outside the earth's atmosphere.

For the orderly development of the Company's space and missile programs, product branch organizations have been created within the Aero-Space Division structure. Minuteman, Saturn booster, X-20 and Bomarc branches have been set up. By this means, the various program activities of engineering, administration and operations are brought under the line direction of the product management.

Minuteman missile in silo test firing sends smoke ring aloft



# Military Aircraft

Following ten years of production, the 744th and last B-52 eight-jet bomber was delivered to the Strategic Air Command in October. Eight different models had been delivered to the U. S. Air Force. The 1952 annual report contained this statement: "Your management believes the B-52 will be in demand for a substantial period of time..."

For almost a quarter of a century, Boeing bombers have flown as the nation's first line of strategic defense. The B-17 Flying Fortress and the B-29 Superfortress of World War II and the B-50 of early postwar years, were followed by the Boeing B-47, first of the big swept-wing jet bombers. Many B-47s are still in service backing up the missile-carrying B-52.

To maintain the two Boeing multi-jet bombers in service beyond the useful life span specified in the original contracts, the Company has devoted extensive research and development effort to such modifications as the "long life wing" which now is being installed on a substantial number of B-52G and H model bombers. Other modifications have made it possible for B-47s and B-52s to perform missions far beyond original requirements. Continuing modification, maintenance and fleet support work for the B-52 is anticipated.

Production continues on the KC-135 jet tanker-transport for the Air Force. More than 570 have been delivered for aerial refueling service to increase the range of jet bombers and fighters. The versatile craft also serve as flying Command Posts for the Strategic Air Command, and are quickly convertible to troop- or cargo-carrying duty. In 1962, 76 KC-135s and 31 C-135 logistic jet transports were delivered to the Air Force.

During the year just passed, the Company also delivered to the U. S. Air Force an extra-long-range VC-137C jet transport as a special missions vehicle for members of the Executive branch of the government. This aircraft is a special adaptation of the turbofan-powered 707-320B and joins three smaller Boeing 707s in the Military Air Transport Service special air missions fleet.

Military twin-turbine helicopter deliveries to the U. S. Army and Marine Corps were begun in 1962. The tandem-rotor "Sea Knight" will be the Marines' medium assault helicopter. The "Chinook", a larger tandem-rotor aircraft, is a primary tactical transport helicopter for Army service. Versions of the "Sea Knight" are also on order for the Royal Canadian Air Force, the Swedish Navy and Air Force, and the Japanese Self Defense Force.

Heavy engineering emphasis was placed on the TFX supersonic fighter competition during the year. Although the award went to a competitor, the effort expended has resulted in a strong management and technical team whose special skills provide a basis for continuing product development programs. The Company believes that requirements for manned military aircraft will continue and is determined that its experience and proved excellence in this field shall not be lost to the nation's defense requirements.



Chinook is Army's twin-turbine helicopter to replace piston engine medium transport fleet



A C-135 logistic jet transport at Calcutta during emergency airlift of supplies to India

## Diversified Programs



Less spectacular in their immediate impact than major programs of the Company, such diversified programs as the Boeing gas turbine engines and the hydrofoil boat development have positive places in the Company's over-all product and development pattern.

### GAS TURBINE ENGINE

Major focus of effort in the Industrial Products Division is on gas turbine engines for aircraft application. The division currently is producing 300-horsepower turboshaft engines for the U. S. Navy's drone anti-submarine helicopter and a follow-on contract for the engines has been received. The engine's reliability contributed measurably to the success of the drone helicopter in extensive Navy trials.

In addition to the aircraft engine development, Boeing gas turbines power more than 250 jet engine starter units owned by airlines and service firms around the world. Similar compressor units have been sold for ground support of American fighter aircraft stationed in Europe. Experimental non-aircraft applications of the turbines include use in hydrofoil boats, as power for heavy military vehicles, as pump drives in oil well cementing rigs, and as heat-and-power supply in evaluation of natural gas fuel systems to supply all of a building's electrical, heating and air-conditioning needs.

### HYDROFOIL CRAFT

Launching of the U. S. Navy Patrol Craft (Hydrofoil) "High Point" during 1962 was another notable "first" for the Company. The 110-foot subchaser is being outfitted prior to sea trials. Its wholly submerged foils represent a radical departure from previous hydrofoil designs. Two other foil-borne craft are in use or development in the Company's Advanced Marine Vehicle organization. One of the test boats (opposite) is propelled by a water-jet system powered by a Boeing gas turbine engine. The other, called HTC for Hydrofoil Test Craft, was built under a Navy contract to provide a vehicle for testing a variety of high speed submerged foil designs.

### ASSOCIATED PRODUCTS

Boeing Associated Products organization continues to license for manufacture by-product developments resulting from the Company's efforts in its regular product lines.

U.S. Navy drone anti-submarine  
helicopter lands on mother ship.  
Power is by Boeing gas turbine



"Flying" on underwater wings,  
this hydrofoil test vehicle is  
propelled by jet of pumped water

## Research

Electron microscope in Boeing laboratory: another essential tool of scientific research



In today's technological explosion, if a company is to remain competitive in the aerospace field, its research and development effort must constantly lay a sound pathway of increased knowledge for the designers-for-tomorrow. This is historically the approach of The Boeing Company in its planned research efforts. Such planning has maintained a balance between applied, or product research and the basic scientific investigation which is not product-oriented.

Of particular value to the extensive product and process research programs of the various Company divisions is the program of the Boeing Scientific Research Laboratories which brings in leading scientists of the world for lectures and consultations in which all Company researchers may participate. These distinguished guests, whose visits are stimulated by the opportunities to exchange ideas with Boeing staff scientists, come to the laboratories on an average of one a week throughout the year.

Each division of the Company maintains its own research staffs and provides facilities for them in a variety of fields. In areas in which a single large facility can serve the entire Company, such a facility and staff is maintained by a division for the benefit of all segments of the Company. The extensive Boeing wind tunnel complex, with tunnel velocities available from sub-sonic to twenty-seven times the speed of sound, is an example of this inter-divisional service.

Of increasing importance, as the intense heating and cooling exposures of space flight and reentry velocities present their special problems, is exhaustive research into structural materials which will withstand these extremes and the rapid changes from one to the other which must be anticipated. Your Company's extensive research into exotic metals and alloys and into ceramic and ablative surfaces continues on an accelerated basis. As new materials prove practical, researchers in processing methods work to develop the means and the tools to utilize these materials in manufacturing. In such instances, results of basic research into the molecular structure and other characteristics of new materials are of the greatest help to materials and processing researchers.

Flight research today must include consideration of human reactions to the stresses of extreme flight velocities and to the psychological effects of isolation, restricted living space and the unnatural environment of space. Bio-astronautics research explores these as well as life support systems for the future.





Engineering and technical offices are housed in new Development Center building



Electronic computers and their human programmers share this modern facility



Administration building and, extreme left, mockup facility, at Transport Division

Continuing its policy of plowing back a substantial percentage of earnings to insure capacity as well as capability to handle present and future commitments, the Company has increased the physical plants of three divisions during the past year.

In an \$8.5 million purchase from the United States government, the Company acquired Air Force Plant 20, which includes the final assembly building at the Transport Division's Renton complex, and certain equipment installed in it. The plant includes factory and warehouse space on 93 acres. More than 2.2 million square feet of covered area are included.

Also at the Renton facility, construction was completed on a new administration building and a mockup building in which customer interior layouts and systems mockups are developed for the family of Boeing jet transports. A new hangar is being added to the field facilities at the Renton plant.

The increasing percentage of technical and research personnel required in today's aerospace industry is reflected in three current additions to Aero-Space Division facilities in Seattle. One of the buildings houses electronic computers; another permits concentration of radiation research equipment, and the third will house a Standards, or Metrology, laboratory. Equipment in each of the three new buildings is designed to provide the Company with the outstanding tools available to the industry.

An additional two-story office building has been erected at the Seattle Developmental Center to consolidate previously dispersed elements of engineering and development units.

To provide for expanded helicopter production required by recent orders, and to consolidate certain activities, a new three-unit facility was occupied in late 1962 near the Vertol Division's Morton, Pennsylvania, plant. The first unit of a dynamic system center, an engineering center and a cafeteria building, with a total of 365,000 square feet of covered floor area, are included in the new facility.

At a test site north of Seattle, facilities for simulating conditions of space environment, including the swift temperature rises of reentry heating, have been built. One chamber has a volume of 10,000 cubic feet in which components, equipment and, in some cases, whole vehicles can be subjected to conditions simulating altitudes up to 200,000 feet and actual temperatures up to 2,000 degrees.

## Facilities

In an atmosphere of keen competition, both domestic and foreign, Boeing in 1962 maintained its lead in the field of commercial jet transports. Additional orders for 28 aircraft during the year included nine of the Model 707-320C cargo jets whose introduction into airline service is expected to stimulate the air freight business. The new cargo planes are convertible to various combination freight and passenger configurations, a feature which provides extra economy benefits to customer airlines.

Near year end, the Australian government announced that the two major domestic airlines, Trans Australia and Ansett-ANA, had been granted approval to purchase Boeing 727 short-to-medium-range jets. Initial orders would be for two 727s for each carrier. The orders, confirmed in January of 1963, bring Boeing jets to all three major Australian airlines.

In November, the first 727 short-to-medium-range jetliner was rolled from final assembly and moved to the flight line for first-flight preparation. Early in February, 1963, the 727 made a highly successful first flight, launching an intensive flight test program. Deliveries of this three-engine plane, latest of the Company's family of commercial jets, will start late in 1963.

During 1962, the first 707-320B turbofan Intercontinental jetliners went into airline service. This largest of the 707 fleet has increased engine thrust, range and efficiency in addition to reduced runway length requirements. It is presently the only aircraft capable of economic regular non-stop service between Europe and the West Coast of the United States.

On the fourth anniversary of commercial introduction of the big jets, customer airlines cooperated with the Company to provide a precise statistical picture of the Boeing jet fleets in service. The figures showed, among other items, that a Boeing jetliner was taking off or landing somewhere in the world on an average of every 45 seconds around the clock. More than 30 million passengers had been carried by the 27 airlines then flying Boeing jets. One plane had given 19.85 hours of flight service in one day. High weekly utilization average was 14.3 hours a day.

The Boeing 720B intermediate-range jetliner, with its high performance and outstanding economy, continues to impress passengers and airlines. Interest in this model continues strong.

Company efforts in supersonic airliner research continue in all areas from aerodynamics to propulsion systems. It is Boeing policy to maintain the Company in the forefront of design and fabrication methods against the time when the production of such an aircraft becomes desirable and economically feasible for the airlines.

Delivery of four twin-turbine Boeing-Vertol 107 helicopters to New York Airways during 1962 has made that airline the world's first to convert to all twin-turbine equipment with its increased speed and safety of operation. The 107 is also being produced for airline use under license by the Kawasaki Aircraft Company, Ltd. in Japan.



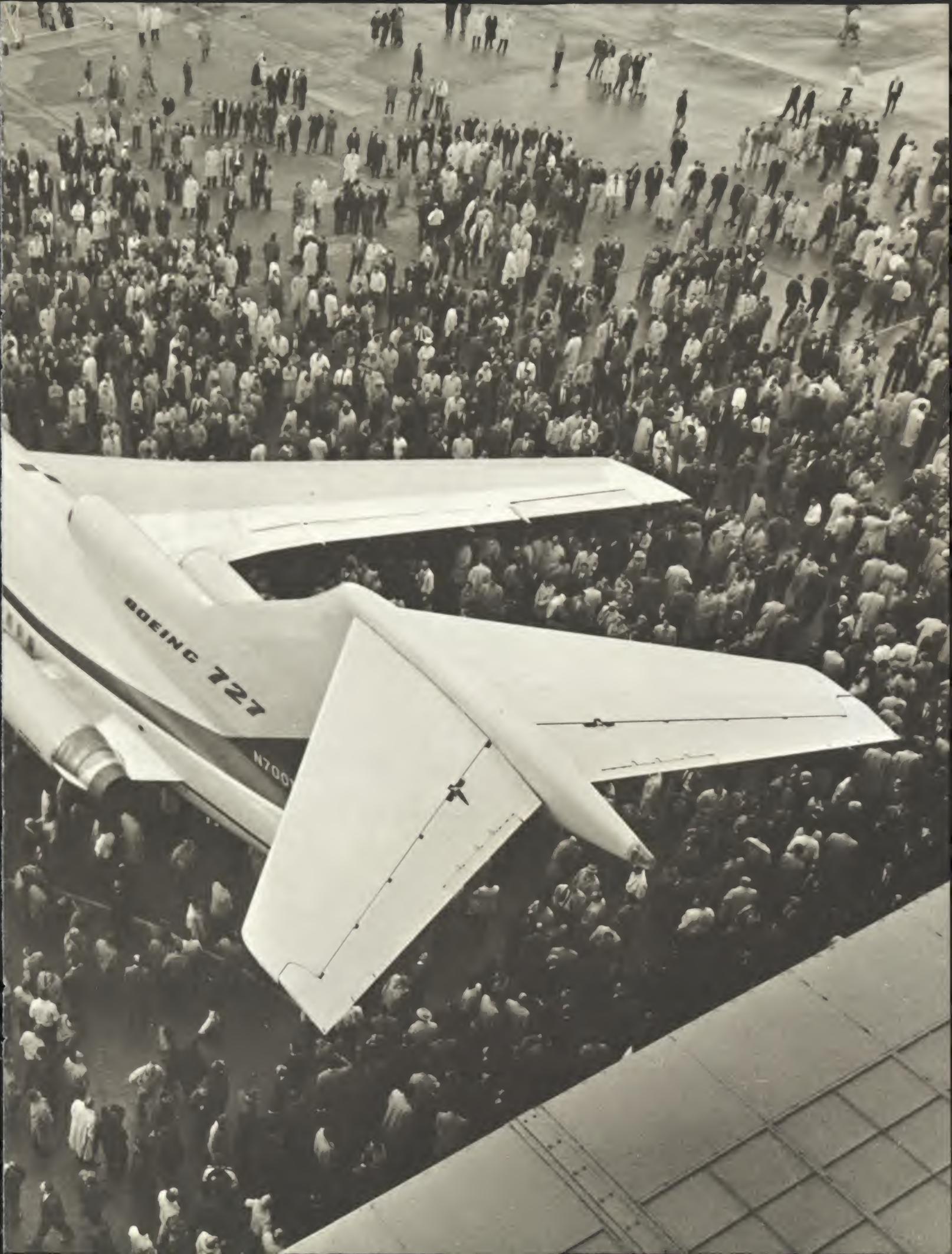
## Commercial Aircraft

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The Company's new Model 727 jetliner, as it rolled from final assembly in November, was surrounded by enthusiastic Boeing people and their guests. A view of that scene appears on pages 16 and 17







## Financial Review

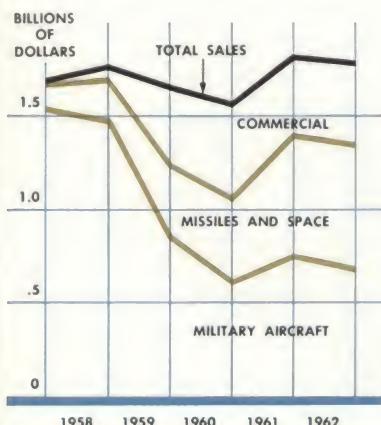
Sales (in millions)	1962	1961
Military Aircraft . . . . .	\$ 669 . . . . .	\$ 732
Missiles & Space . . . . .	679 . . . . .	660
Commercial . . . . .	421 . . . . .	409
<b>  TOTAL . . . . .</b>	<b>\$1,769 . . . . .</b>	<b>\$1,801</b>

During 1962, sales increased under Minuteman, KC-135, and C-135 programs, and to a lesser extent, under the X-20 program. This increase, together with the first sales recorded on the NASA advanced Saturn booster contract, substantially offset the decline in sales that resulted from the phaseout of deliveries of B-52s and Bomarc missiles and bases in the latter part of the year.

In addition to changes in the product line, the level of sales recorded for the year was affected by the transition of a major portion of the Minuteman program from a cost reimbursement to a fixed-price incentive contract basis. Since sales under fixed-price type contracts are not recorded until deliveries are made, such transition resulted in 1962 sales being somewhat lower than would have been the case had there been no change in contract type.

1963 should see further increases in sales under Minuteman contracts, with Minuteman continuing as the Company's largest military program. Sales resulting from work under the advanced Saturn booster contracts should also show a significant increase over the 1962 level. Commercial transport sales will be down in the year 1963, rising again in 1964 as deliveries of 727s in significant numbers commence. While X-20 (Dyna-Soar) sales will rise moderately, KC/C-135 deliveries are scheduled at a rate somewhat below that of 1962. B-52 modification and maintenance programs are expected to remain at relatively high levels during the year, but no further production of this aircraft is scheduled.

### Sales by Product Line



## Net Earnings and Cash Dividends

Earnings	1962	1961
Net earnings (millions)	\$27.2	\$35.7
Profit margin . . . . .	1.54%	1.98%
Earnings per share . . . . .	\$ 3.40	\$ 4.47

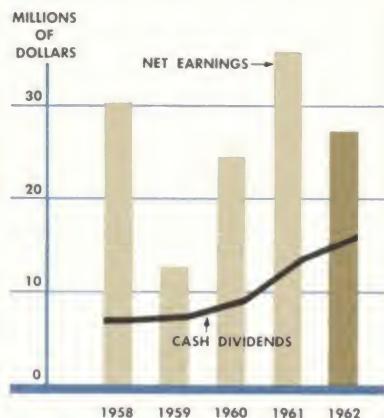
Net earnings recorded in 1962 were affected, as in previous years, by research, developmental, and other charges attributable to the jet transport and the Model 107 helicopter programs. As explained in previous reports, such costs are charged to earnings as they are incurred. This accounting practice, while properly conservative, has the effect of charging against current earnings, research, developmental, and other costs applicable to aircraft that are currently being produced, as well as aircraft that will be produced and delivered in future years.

During 1962, a further recovery of prior years' losses under the 707/720 jet transport program was recorded. However, the effects of additional sales and favorable cost trends on this program were partially offset by the costs associated with the introduction of the Model 707-320B long-range passenger transport and the Model 707-320C cargo and convertible cargo-passenger transport. The 707-320C will go into airline service in 1963.

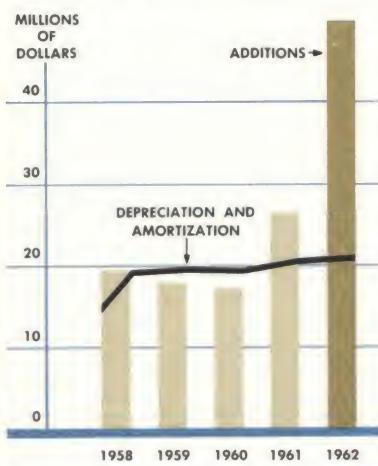
Total sales for the Company in 1963 will equal or exceed the 1962 level, assuming that present programs and schedules are not materially changed. The profit margin, however, will be adversely affected by the decline, in 1963, of deliveries of 707 and 720 jet transports, and by the continued high level of research, developmental, and other charges relating to the 727 program and the Model 107 helicopter programs.

### Property, Plant, and Equipment

Gross additions to property, plant, and equipment in 1962 amounting to \$50,143,000 represent the largest annual expenditure for



## Property, Plant, and Equipment



facilities in the history of the Company. Principal new facilities are described on page 13. Substantial additional expenditures are planned during the next two years. This reflects the Company's assessment of trends in the aerospace industry; namely, that the exploitation of existing and anticipated opportunities will require facility capabilities oriented toward the advanced technologies related to potential market areas. In the space systems field, in particular, expansion and continued modernization of laboratories and testing facilities are prerequisites to the full utilization of the Company's substantial technical and management capabilities.

## Financial Resources

Substantial funds were required in 1962 for increased work-in-process inventories and for an expanded facilities acquisition program. During the year the Company sold five jet transports that were on lease to customers at the beginning of the year and sold certain long-term notes from airline customers to a group of commercial banks. Bank borrowings at the year end were \$66.6 million. The following funds statement indicates the principal factors affecting cash flow in 1962 (in millions).

<i>Sources</i>	<i>Uses</i>
Net earnings . . . . .	\$27.2
Depreciation and amortization of property, plant, and equipment . . . . .	21.0
Decrease in jet transport financing . . .	34.7
Other . . . . .	1.2
Total . . . . .	<u><u>\$84.1</u></u>
	Total . . . . .
	<u><u>\$84.1</u></u>

## Dividends

Quarterly dividends of \$.50 per share were paid in 1962. This conforms to the rate established in the fourth quarter of 1961. The \$16 million paid out in 1962 compares to \$13.5 million in 1961 and \$9.1 million in 1960.

## Federal Income Taxes

The Internal Revenue Service has reviewed and agreed to all Federal income tax returns through the year 1958, except for certain refund claims which are still pending. The income tax liability stated on the balance sheet is believed to provide adequately for the years

1959 through 1962. The pending refund claims have not been recorded in the accounts.

#### Backlog-\$1,620,000,000

Unfilled orders of the Company at the end of 1962 were \$1,620 million. Orders from commercial customers, primarily for jet transports, amounted to \$744 million. The remaining \$876 million represents the value of contracts with the United States Government, to the extent funds have been appropriated by Congress and obligated to contracts by the procuring agencies. Were recognition given to Government contracts currently under negotiation and to other amounts believed to be firmly established in Department of Defense and NASA procurement plans, unfilled orders would be substantially increased.

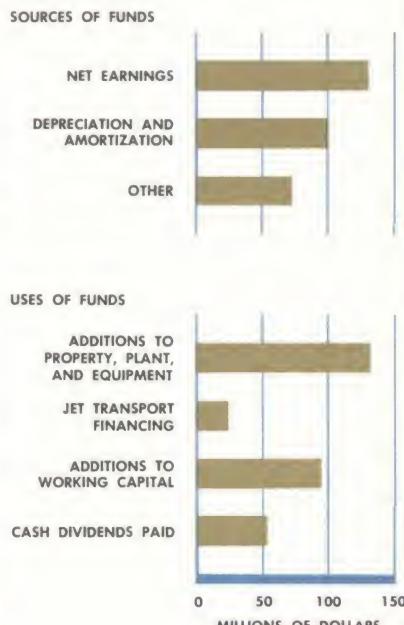
#### Renegotiation

During 1962 the Renegotiation Board issued clearances with respect to renegotiable profits of the Company for the years 1958 and 1959. In the 1961 Annual Report it was reported that a motion was pending before the Tax Court to review the findings of the trial judge concerning renegotiable profits for the year 1952. This finding, which increased the original determination of excessive profits by the Renegotiation Board to \$13 million, has been reviewed by the judge and reaffirmed. The Company has filed an appeal with the United States Court of Appeals for the Ninth Circuit. It is anticipated that the appeal will be heard during the first half of 1963 and that a decision will be rendered before the end of the year. Taking into account the refund previously made and appropriate credit for Federal income taxes paid, an additional provision of \$900,000 will be required if the finding of the Tax Court is sustained.

The status of renegotiation proceedings and their effects upon the Company's financial statements are summarized below:

The Renegotiation Board has unilaterally determined that the Company realized excessive profits for the years 1952 through 1955 and has issued clearances for the years 1956 through 1959. Appeals have been taken to the Tax Court of the United States for the years 1952 through 1955. Although all refunds determined to be payable by the Renegotiation Board have been paid or provided for in the accounts, this policy has not been extended to include the additional amount determined to be payable for 1952, pending the outcome of the appeal to the United States Court of Appeals. The Company cannot predict the effect of the Tax Court decision on the appeals for the years 1953 through 1955, nor what the Board's action will be for the years 1960 through 1962. In view of these uncertainties and the belief of the Company that no excessive profits were realized, no provision has been made for renegotiation refunds other than those presently determined by the Board.

#### Funds Statement 1958-1962



Wind tunnel shape



1962 was a year of accomplishment for Boeing in several important areas. It was also a year of disappointment and difficulty.

The Company did not acquire the amount of new business which it had hoped for. Strong effort was made in several competitions, with the awards going to other companies. It should be recognized, however, that the technical competency developed in these competitions will be a valuable aid in future efforts.

It is disappointing that a settlement has not yet been reached with the unions representing production and maintenance employees. The non-statutory efforts of the Government in this area have not been helpful. It is hoped that a proper settlement will be reached prior to the expiration of the injunction now in effect pursuant to the provisions of the Taft-Hartley Act.

It would be a mistake, however, to put undue emphasis on our problems to the exclusion of the very real progress that the Company registered during the year.

In our view, the contributions of the Company to the Minuteman Program were outstanding. We will have a large effort on Minuteman for a number of years. A good start has been made on the Saturn Program which is expected to continue its growth throughout the middle Sixties. The X-20 (Dyna-Soar) program leads the way into controlled-reentry space flight.

Although our helicopter division has had the usual problems attendant upon rapid growth and the emergence of two new advanced models, we believe the future in this field should see expanding business and profitability.

In the commercial field, the long-range 707-320B which went into service in 1962, and the convertible cargo-passenger 320C which will enter service in 1963, are outstanding aircraft. We expect to realize continuing sales of these models as well as the 707, 720 and 727 series throughout the Sixties.

Our newest model, the short-to-medium-range 727, is in the early stages of trying its wings as this report is being written. Flight tests to date are highly encouraging. It should be recognized, however, that substantial additional sales must be made for this program to be a financial success.

We repeat and reaffirm the statement made in last year's report—"Substantial risks are involved in our business and it should be recognized that we are faced with hazards, many beyond our control."

Nonetheless, our technical, scientific and physical resources continue a steady and encouraging growth. We have confidence that the Company's most valuable asset—the competence and know-how of its people—augurs well for the future of the Company.

February 20, 1963



President

## Looking to the Future

## FIVE YEAR COMPARATIVE FINANCIAL DATA

Dollars in millions, other than per share amounts.

### SALES, EARNINGS, AND DIVIDENDS

YEAR ENDING DEC. 31	TOTAL SALES	EARNINGS BEFORE INCOME TAXES		NET EARNINGS			CASH DIVIDENDS	
		AMOUNT	% OF SALES	AMOUNT	% OF SALES	PER SHARE	AMOUNT	PER SHARE
1962	\$1,769	\$56.3	3.18	\$27.2	1.54	\$3.40	\$16.0	\$2.00
1961	1,801	73.9	4.10	35.7	1.98	4.47	13.5	1.70
1960	1,555	51.8	3.33	24.5	1.57	3.07	9.1	1.14
1959	1,649	26.4	1.60	12.7	0.77	1.60	7.4	0.92
1958	1,752	63.4	3.62	30.2	1.72	3.82	7.0	0.89

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### FINANCIAL POSITION DATA

YEAR ENDING DEC. 31	WORKING CAPITAL	LONG-TERM NOTES RECEIVABLE	LEASED AIRCRAFT	PROPERTY, PLANT, AND EQUIPMENT AT COST		LONG-TERM DEBT	STOCKHOLDERS' INVESTMENT	
				AMOUNT	NET		AMOUNT	PER SHARE
1962	\$197	\$13	\$10	\$261	\$115	\$65	\$271	\$33.89
1961	179	25	32	214	86	65	259	32.49
1960	200	17	8	189	81	71	237	29.73
1959	205	2	—	172	83	71	222	27.80
1958	198	—	—	155	85	71	214	27.04

Notes: (a) All per share data adjusted to reflect stock dividends and stock splits.

(b) Vertol Aircraft Corporation, acquired in 1960, included in data for prior years.

## PRINCIPAL SOURCES AND USE OF FUNDS

NET EARNINGS	SOURCES		DEBENTURES AND CAPITAL STOCK SOLD	CASH DIVIDENDS PAID	ADDITIONS TO PROPERTY, PLANT, AND EQUIPMENT	USES		YEAR ENDING DEC. 31
	DEPRECIATION AND AMORTIZATION					INCREASE (DECREASE) IN JET TRANSPORT FINANCING	INCREASE (DECREASE) IN WORKING CAPITAL	
\$27.2	\$21.0	\$ 0.8	\$16.0	\$50.1	\$(34.7)	\$18.0	1962	
35.7	20.6	(5.6)	13.5	26.8	32.4	(20.7)	1961	
24.5	19.4	—	9.1	17.4	22.3	(4.7)	1960	
12.7	19.5	2.2	7.4	18.1	2.5	7.0	1959	
30.2	19.1	73.8	7.0	19.5	—	94.8	1958	

## GENERAL INFORMATION

SHARES OF CAPITAL STOCK OUTSTANDING AT YEAR END	BACKLOG AT YEAR END	FLOOR AREA AT YEAR END (In Million Square Ft.)			AVERAGE NUMBER OF EMPLOYEES	TOTAL SALARIES AND WAGES	YEAR ENDING DEC. 31
		BOEING OWNED	LEASED	GOV'T OWNED			
7,992,376	\$1,620	10.79	2.31	10.81	104,100	\$768	1962
7,982,430	1,869	7.21	1.92	11.83	88,200	629	1961
7,971,647	2,139	6.62	1.71	11.42	81,900	556	1960
7,970,640	2,018	6.45	1.77	11.72	92,500	579	1959
7,768,735	2,470	6.13	2.18	11.70	95,400	566	1958

**BALANCE**

THE BOEING COMPANY

**ASSETS****CURRENT ASSETS**

Cash.....	\$ 28,345,000
Amounts receivable under United States Government contracts	157,700,000
Other accounts and notes receivable.....	10,125,000
<b>Inventories.....</b>	<b>309,489,000</b>
Prepaid expenses.....	<u>3,877,000</u>
<b>Total Current Assets.....</b>	<b>\$509,536,000</b>
<b>LONG-TERM NOTES RECEIVABLE.....</b>	<b>12,953,000</b>
<b>LEASED AIRCRAFT.....</b>	<b>9,578,000</b>
<b>PROPERTY, PLANT, AND EQUIPMENT, at cost.....</b>	<b>\$261,485,000</b>
Less accumulated depreciation and amortization.....	<u>146,554,000</u>
<b>DEFERRED CHARGES.....</b>	<b><u>1,146,000</u></b>
	<b><u>\$648,144,000</u></b>

**SHEET****DECEMBER 31, 1962****LIABILITIES AND STOCKHOLDERS' INVESTMENT****CURRENT LIABILITIES**

Notes payable to banks..... \$ 66,600,000

Accounts payable and accrued expenses..... 217,396,000

Allowance for 1954 and 1955 renegotiation, net of taxes..... 7,768,000

Federal taxes on income..... 20,393,000

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**Total Current Liabilities**..... \$312,157,000

**LONG-TERM DEBT**..... 65,132,000

**STOCKHOLDERS' INVESTMENT**

Capital stock, par value \$5 a share—

Authorized, 10,000,000 shares

Issued and outstanding, 7,992,376 shares at stated value.....

\$127,132,000

Retained earnings..... 143,723,000 270,855,000

\$648,144,000

See notes to financial statements.

THE BOEING COMPANY

STATEMENT OF NET EARNINGS

YEAR ENDED DECEMBER 31, 1962

Sales . . . . .	\$1,768,535,000
Other income . . . . .	<u>2,241,000</u>
	\$1,770,776,000
Costs and expenses . . . . .	\$1,708,236,000
Interest and debt expense . . . . .	6,286,000
Federal taxes on income . . . . .	<u>29,100,000</u>
NET EARNINGS . . . . .	<u>\$ 27,154,000</u>
Depreciation and amortization of plant and equipment . . . . .	<u>\$21,049,000</u>

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STATEMENT OF STOCKHOLDERS' INVESTMENT

YEAR ENDED DECEMBER 31, 1962

	CAPITAL STOCK SHARES	AMOUNT	RETAINED EARNINGS
Balance at January 1, 1962	7,982,430	\$126,843,000	\$132,545,000
Net earnings . . . . .			27,154,000
Shares sold to officers and employees under stock option plans . . . . .	9,826	283,000	
Shares issued in exchange for Convertible Subordinated Debentures . . . . .	120	6,000	
Cash dividends paid, \$2.00 a share . . . . .			(15,976,000)
Balance at December 31, 1962 . . . . .	<u>7,992,376</u>	<u>\$127,132,000</u>	<u>\$143,723,000</u>

See notes to financial statements.

## NOTES TO FINANCIAL STATEMENTS

### INVENTORIES:

Inventories are composed of:

Fixed-price type contracts in process.....	\$593,630,000
Commercial spare parts.....	23,775,000
General stock materials.....	7,997,000
	<hr style="border: 0.5px solid black;"/>
Less advances and progress payments.....	\$625,402,000
	315,913,000
	<hr style="border: 0.5px solid black;"/>
	\$309,489,000

Military fixed-price incentive type contracts in process are stated at the total of direct costs and overhead applicable thereto, less the estimated average cost of deliveries based on the estimated total cost of the contracts. Work in process on straight fixed-price contracts is stated in the same manner, except that applicable research, developmental, administrative, and other general expenses are charged directly to earnings as incurred.

To the extent that estimated costs of units scheduled for production, determined in the above manner, are expected to be greater than total sales price, the portion of such excess related to work in process is currently charged to earnings. The resultant inventory is stated at estimated proportionate sales value.

Commercial spare parts and general stock materials are stated at average cost, not in excess of realizable value.

### LONG-TERM DEBT AND RESTRICTIONS ON RETAINED EARNINGS:

5% Sinking Fund Debentures, less \$5,399,000 re-acquired debentures in treasury.....	\$34,601,000
4½% Convertible Subordinated Debentures.....	30,531,000
	<hr style="border: 0.5px solid black;"/>
	\$65,132,000

Sinking fund requirements under the 5% Sinking Fund Debentures, due in 1978, are \$2,700,000 annually beginning in 1964. Reacquired debentures may be applied against requirements.

The 4½% Convertible Subordinated Debentures, due in 1980, are convertible at two shares for each \$100 principal amount. Of the Company's unissued capital stock, 610,630 shares are reserved for conversion of the debentures. The annual sinking fund requirements beginning in 1968 amount to \$1,750,000 less credits for previously converted debentures.

The indentures under which the debentures were issued place various restrictions on the use of retained earnings for the payment of cash dividends or acquisition of the Company's capital stock or subordinated indebtedness. At December 31, 1962, the maximum amount of retained earnings restricted under these indentures was \$39,076,000.

### RETIREMENT PLAN:

Under the Company's noncontributory retirement plan, a charge of \$20,647,000 has been made in the accounts for the year 1962, of which \$19,001,000 represents current service and \$1,646,000 is applicable to past service. At December 31, 1962, the past service liability not recognized in the accounts was estimated at \$6,230,000.

### STOCK OPTIONS AND INCENTIVE COMPENSATION:

At December 31, 1962, options for 125,736 shares of the Company's stock, at prices ranging from \$21.88 to \$47.92 were outstanding, of which 28,539 shares were exercisable. During 1962, 9,826 shares were issued upon exercise of options at prices ranging from \$21.88 to \$32.66; options were granted for 15,750 shares at \$39.75 and 5,000 shares at \$40.875; and options for 800 shares were cancelled.

An additional 87,767 shares are available for future grants under the restricted stock option plan.

Incentive compensation provided for the year 1962 was \$3,250,000.

### RENEGOTIATION:

For details regarding the status of renegotiation refer to page 21.

## OFFICERS



WILLIAM M. ALLEN



C. L. EGTVEDT



WELLWOOD E. BEALL



D. J. EULER



THORALF E. GAMLEM



C. B. GRACEY



H. W. HAYNES



FRED P. LAUDAN



A. F. LOGAN



GEORGE C. MARTIN



LOWELL P. MICKELWAIT



J. E. PRINCE



GEORGE SCHAIRER



N. D. SHOWALTER



GEORGE SNYDER



EDWARD C. WELLS



T. A. WILSON



LYSLE A. WOOD



J. O. YEASTING



DON R. BERLIN



J. B. CONNELLY



ROBERT H. JEWETT



V. F. KNUTZEN



ROBERT J. MURPHY, JR.



EVAN M. NELSEN



GEORGE H. STONER



R. W. THARRINGTON

## 1962 Changes in Board of Directors

*Lowell P. Mickelwait, vice president—industrial and public relations, was elected to the Board on October 12.*

*Dietrich Schmitz, a director since 1934, retired from the Board on December 17. In appreciation of his years of service to the Company, Mr. Schmitz was voted the honorary title of Director Emeritus.*

## OFFICERS AND DIRECTORS

**WILLIAM M. ALLEN**  
*President, Director*

**C. L. EGTVEDT**  
*Chairman, Director*

**WELLWOOD E. BEALL**  
*Senior Vice President, Director*

**DON R. BERLIN**  
*Vice President—Assistant to General Manager, Vertol Division*

**W. L. CAMPBELL**  
*Director, President, General America Corp., Seattle*

**J. B. CONNELLY**  
*Vice President—Assistant General Manager, Transport Division*

**D. J. EULER**  
*Vice President—General Manager, Industrial Products Division*

**D. A. FORWARD**  
*Director, Retired Vice Chairman, First National City Bank, New York*

**THORALF E. GAMLEM**  
*Vice President—Assistant General Manager, Transport Division*

**ARTEMUS L. GATES**  
*Director, Consultant, New York*

**C. B. GRACEY**  
*Vice President—Manufacturing*

**H. W. HAYNES**  
*Vice President—Finance*

**ROBERT H. JEWETT**  
*Vice President—Assistant General Manager, Aero-Space Division*

**V. F. KNUTZEN**  
*Controller*

**FRED P. LAUDAN**  
*Vice President, Director Emeritus*

**A. F. LOGAN**  
*Vice President—Labor Relations*

**GEORGE C. MARTIN**  
*Vice President—General Manager, Seattle Branch, Military Aircraft Systems Division*

**LOWELL P. MICKELWAIT**  
*Vice President—Industrial and Public Relations. Director*

**ROBERT J. MURPHY, JR.**  
*Vice President—Washington Representative*

**EVAN M. NELSEN**  
*Treasurer*

**J. E. PRINCE**  
*Vice President—Administration and Corporate Secretary. Director*

**WILLIAM G. REED**  
*Director, Chairman, Simpson Timber Company, Seattle*

**GEORGE SCHAIERER**  
*Vice President—Research and Development*

**N. D. SHOWALTER**  
*Vice President*

**D. E. SKINNER**  
*Director, President, Skinner Corporation, Seattle*

**GEORGE SNYDER**  
*Vice President—Manager, X-20 (Dyna-Soar) Branch, Aero-Space Division*

**GEORGE H. STONER**  
*Vice President—Manager, Saturn Booster Branch, Aero-Space Division*

**R. W. THARRINGTON**  
*Vice President—General Manager, Vertol Division*

**EDWARD C. WELLS**  
*Vice President—General Manager, Military Aircraft Systems Division, Director*

**GEORGE H. WEYERHAEUSER**  
*Director, Executive Vice President, Weyerhaeuser Company, Tacoma*

**T. A. WILSON**  
*Vice President—Manager, Minuteman Branch, Aero-Space Division*

**LYSLE A. WOOD**  
*Vice President—General Manager, Aero-Space Division*

**JOHN O. YEASTING**  
*Vice President—General Manager, Transport Division, Director*

## ACCOUNTANTS' REPORT

TOUCHE, ROSS, BAILEY & SMART  
CERTIFIED PUBLIC ACCOUNTANTS

610 WASHINGTON BUILDING  
SEATTLE 1, WASHINGTON  
March 11, 1963

Board of Directors  
The Boeing Company  
Seattle, Washington

We have examined the accompanying balance sheet of The Boeing Company as of December 31, 1962 and the related statements of net earnings and stockholders' investment for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We were unable to obtain satisfactory confirmations of receivables from the United States by direct communication, but we satisfied ourselves as to such accounts by other auditing procedures.

In our opinion, subject to the uncertainties as to required renegotiation refunds (see page 21), the financial statements referred to above present fairly the financial position of The Boeing Company at December 31, 1962 and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Also, in our opinion, the action of the Board of Directors on March 11, 1963, in setting aside the sum of \$3,250,000 for the year 1962 under the Incentive Compensation Plan for Officers and Employees, is in conformity with the provisions contained in the first paragraph of Section 2 of such plan.

*Touche, Ross, Bailey & Smart*

Certified Public Accountants

GENERAL COUNSEL	HOLMAN, MARION, BLACK, PERKINS & COIE
GENERAL AUDITORS	TOUCHE, ROSS, BAILEY & SMART
TRANSFER AGENT	FIRST NATIONAL CITY BANK, NEW YORK CITY
REGISTRAR	BANKERS TRUST COMPANY, NEW YORK CITY

THE **BOEING** COMPANY  
GENERAL OFFICES - 7755 EAST MARGINAL WAY - SEATTLE 24, WASHINGTON



### The Faces of Research

"Let no improvement pass us by . . ."

*W. E. Boeing*

